

REMARKS

Claims 1, 2, 4, 6, 7, 12-14, and 16-20 are pending in this application. By this Amendment, claims 1, 13, and 18 are amended. Support for the amendments to the claims may be found, for example, in the specification at paragraph [0041]. No new matter is added.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (as the amendments amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

In view of the foregoing amendments and following remarks, Applicants respectfully request reconsideration and allowance.

I. Rejection under 35 U.S.C. §112, First Paragraph

The Office Action rejects claims 1, 2, 4, 6, 7, 12-14, and 16-20 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. By this Amendment, claims 1 and 18 are amended to overcome the rejection. Specifically, claims 1 and 18 are amended to recite: "a weight ratio of said first organic binder component with respect to said first inorganic dielectric colorant powder is ~~less than 10wt%~~ 3 to 16wt%." Support for this amendment may be found, for example, in the specification at paragraph [0041]. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

II. Rejection under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claim 13 as being indefinite under 35 U.S.C. §112, second paragraph. By this Amendment, claim 13 is amended to depend from claim 16.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

III. Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1, 2, 4, 6, 7, 12-14, and 16-20 under 35 U.S.C. §103(a) over U.S. Patent Application Publication No. 2001/0006451 to Miyazaki et al. ("Miyazaki") in view of U.S. Patent No. 5,248,712 to Takeuchi ("Takeuchi") or U.S. Patent No. 5,929,727 to Kagata ("Kagata"). Applicants respectfully traverse the rejection for at least the following reasons.

A. The References Fail to Teach or Suggest that the Second Organic Binder Component Consists of a Combination of Ethyl Cellulose and Benzylbutyl Phthalate

Without conceding the propriety of the rejection, claims 1 and 18 are amended to recite: "said second organic binder component ~~includes~~ consists of a combination of ethyl cellulose and benzylbutyl phthalate." The combination of applied references would not have rendered obvious such a feature for at least the following reasons

The organic binder of Miyazaki is a mixture formed by physically mixing two different organic binders or a copolymer predominantly comprising an alkyl acrylate and/or an alkyl methacrylate. *See* Miyazaki at paragraph [0036]. In contrast, the second organic binder of claims 1 and 18 "consists of a combination of ethyl cellulose and benzylbutyl phthalate." Thus, the second organic binder of claims 1 and 18 differs from the organic binder of Miyazaki. Takeuchi and Kagata do not, nor are they asserted to, teach or suggest a second organic binder that "consists of a combination of ethyl cellulose and benzylbutyl phthalate" as claimed.

The combination of references is deficient in its teachings. Thus, claims 1 and 18, and their dependent claims, would not have been rendered obvious by the applied references.

**B. The References Fail to Teach or Suggest a
Second Weight Ratio of 10.8 to 15.8wt%**

In addition to the reasons presented above, claim 4 would not have been rendered obvious by the combination of references for the following additional reasons. Claim 4 recites "10.8 to 15.8wt%" as the second weight ratio (B). The second weight ratio (B) is the ratio of the second organic binder component with respect to the second inorganic dielectric colorant powder in the electrode level difference absorbing dielectric paste. *See* claim 1. The second organic binder component is a polymeric resin and a plasticizer.

Miyazaki is asserted to teach this feature. *See* Office Action at page 7. Specifically, the Office Action asserts that Miyazaki discloses two binders making up the binder component, the two binders having a ratio of about 90wt% PVD to about 10wt% cellulose ester. *See* Miyazaki at paragraph [0069]. However, despite its asserted disclosures, Miyazaki does not teach or suggest claim 4.

Paragraph [0069] of Miyazaki discloses the ratio for two binders which together compose the organic binder. It does not disclose the second weight ratio (B) as defined in claim 4 nor does it describe the second organic component. Miyazaki actually discloses that the amount of organic binder (corresponding to the polymeric resin in claim 1) is about 1-20wt% on the basis of the entirety of the ceramic powder (corresponding to the ceramic powder of claim 1). *See* Miyazaki at paragraph [0064]. This ratio also does not correspond with the second weight ratio (B).

Miyazaki does not teach or suggest all the features of claim 4. Takeuchi and Kagata do not, nor are they asserted to, cure the above-described deficiency. Accordingly, the combination of references would not have rendered obvious claim 4.

C. Desirable and Unexpected Results

Claims 1, 4, and 18 exhibit desirable and unexpected results over the asserted closest prior art. Even if the polymeric resin of Miyazaki were to be considered the second organic component, as asserted by the Office Action, the Examples and Comparative Examples of Miyazaki show that (B) is less than or equal to (A), as opposed to "said second weight ratio (B) is larger than said first weight ratio (A)," as recited in claims 1 and 18.

In Comparative Examples 1-3 of the present application, when $B=A$ or $B<A$, the ceramic green multilayer chip is not good. *See* specification at Table 2 (paragraph [0082]). In addition, Reference Example 1 demonstrates that when $B=10$, as is the case with the Miyazaki examples, the shrinkage rate is large and there is a 40% internal defect rate in the sample. *See* specification at paragraph [0103]. In other words, when the polymeric resin of Miyazaki is considered to be the second organic component of the claimed invention, as asserted, the effects of the claimed invention cannot be obtained.

These desirable and unexpected results include, for example, green sheets that avoid positional deviation, avoid cutting defects, avoid firing defects, and diminish unsticking between layers. *See* specification at paragraphs [0019]-[0020].

Thus, in view of the unexpected results over the closest asserted prior art, claims 1, 4, and 18 would not have been rendered obvious by the applied combination of references.

Claims 1, 4, and 18 would not have been rendered obvious by the applied references. Claims 2, 6, 7, 12-14, 16, 17, 19, and 20 variously depend from claims 1 and 18 and, thus, also would not have been rendered obvious by applied references. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection.

IV. Conclusion

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Applicants earnestly solicit favorable reconsideration and prompt allowance of the application.

Should the Examiner believe that anything further would be desirable to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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